

ABSTRACT OF THE DISCLOSURE

A system and method of providing a subscriber in an ANSI-41 radio telecommunications network with access to an IN service in a GSM overlay network. A special Preferred Inter-exchange Carrier (PIC) category associated with the IN service is specified in the subscriber's database in the ANSI-41 Home Location Register (HLR). When an originating or terminating call for the subscriber is detected, the special PIC category is translated to a special Carrier Identification Code (CIC) code that is sent to a Mobile Switching Center/Visitor Location Register (MSC/VLR) serving the subscriber. The MSC/VLR analyzes the special CIC code and in response, routes the call to a Service Switching Point (SSP) in the GSM network rather than to an inter-exchange carrier. The SSP then accesses the IN service through a Service Control Point (SCP) in the GSM network.